Office of Chief Counsel
Internal Revenue Service

memorandum

CC:LM:F:POSTU-149783-01
DARosen

date: December 10, 2001

to: Director, Financial Services
Attn: Team Manager Victoria Rex (LM:F)

Director, Pre-Filing and Technical Guidance
Attn: Research Credit Technical Advisor A. Lee Keenan (LM:PFTG)
Research Credit Technical Advisor Mallorie Jeong (LM:PFTG)

from: Area Counsel, Financial Services (CC:LM:F)

---

subject: [redacted]
Research and Experimental Expenditures (I.R.C. § 174)
Credit for Increasing Research Activities (I.R.C. § 41)
Taxable Years Ended June 30, [redacted] through June 30, [redacted]
U.I.L. Nos. 41.51-01, 174.06-00

This responds to your request for assistance in determining whether specified expenditures paid or incurred by [redacted] ("taxpayer") in connection with manufacturing certain [redacted] equipment may be treated as research and experimental expenditures pursuant to section 174.[1] We also respond to your request for assistance in determining whether these specified expenditures may be treated as qualified research expenses under section 41. As discussed, the advice rendered in this memorandum is conditioned on the accuracy of the facts presented to us, and is subject to National Office review. We will contact you within two weeks of the date of this memorandum to discuss the National Office's comments, if any, about this advice.

---

[1] Unless otherwise indicated, all references to "section" are to the Internal Revenue Code of 1986, as amended.

ISSUES

1. May the taxpayer's costs attributable to the component material, labor or other elements involved in the construction and installation of [redacted] equipment be treated as research and experimental expenditures under section 174?

2. May the taxpayer's costs attributable to the component material, labor or other elements involved in the construction and installation of [redacted] equipment be treated as qualified research expenses under section 41?

CONCLUSIONS

1. The taxpayer's costs attributable to the component material, labor or other elements involved in the construction and installation of this [redacted] equipment may not be treated as research and experimental expenditures under section 174.

2. The taxpayer's costs attributable to the component material, labor or other elements involved in the construction and installation of this [redacted] equipment may not be treated as qualified research expenses under section 41.

FACTS

The taxpayer, a Delaware corporation having its principal place of business in [redacted], designs, manufactures, markets, and services [redacted]. For the taxable years ended June 30, [redacted] through June 30, [redacted], the taxpayer filed claims for refunds for research credits attributable to, inter alia, qualified research expenditures ("QREs") paid or incurred in the design, development, and construction of [redacted] equipment ("machines"). Included within the QREs claimed are the costs for the component material, labor, and other elements involved in the construction and installation of these machines, as well as, according to the taxpayer, costs for activities intended to discover information that would eliminate uncertainty concerning their development, improvement, and/or appropriate design.[2]

---

[2] Whether (and to what extent) any of these costs were actually incurred for activities intended to discover information that would eliminate uncertainty concerning the development, improvement, and/or appropriate design of these machines is beyond the scope of this memorandum. Likewise, a determination of

Solely for the purpose of determining the eligibility of the amounts paid or incurred by the taxpayer for the component material, labor, and other elements involved in their construction and installation under sections 41 and 174, these machines can be grouped into the two following broad categories each consisting of two subcategories: (a) machines delivered to customers; and (b) machines which remained "on-site" at the taxpayer's place(s) of business. All of these machines were used for a period of years by either the taxpayer, the customer, or a combination thereof. These categories and their subcategories are defined as follows:

(a) Machines Delivered to Customers

(1) Machines Delivered to Customers - Purchase Price Invoice

The first category of machines delivered to customers are those which were delivered to customers with an invoice for the full purchase price. A representative sample is Machine [redacted]:

(A) Machine [redacted]

Machine [redacted] was manufactured by the taxpayer in the United States and shipped with an invoice for the total sales price, which included a [redacted]-year master warranty. According to the invoice, dated [redacted]. Machine [redacted] was sold by the taxpayer to [redacted] for $[redacted]. The cost of the component material used by the taxpayer in manufacturing Machine [redacted] was $[redacted]. The cost of the labor and other elements involved Machine [redacted]'s construction and installation, as well as the cost (if any) of activities intended to discover information that would eliminate uncertainty concerning Machine [redacted]'s development, improvement, and/or appropriate design has not yet been determined by the examination team.

(2) Machines Delivered to Customers - Zero-Dollar Invoice

The second category of machines delivered to customers are those which were delivered to customers with a "zero-dollar" invoice. A representative sample is Machine [redacted]:

---

whether (and to what extent) the costs associated with any such activities may be treated as qualified research expenses under section 41 is also beyond the scope of this memorandum.

(A) Machine [redacted]

Machine [redacted] was manufactured by the taxpayer in the United States and shipped with a "zero dollar" invoice dated [redacted], stating that the machine was an "[redacted]." Later that same fiscal year, on [redacted], a second invoice was issued to the customer, [redacted], for the full price of the unit. According to the invoice, Machine [redacted] was sold for $[redacted]. The cost of the component material used in manufacturing Machine [redacted] was $[redacted]. The cost of the labor and other elements involved in Machine [redacted]'s construction and installation, as well as the cost (if any) of activities intended to discover information that would eliminate uncertainty concerning Machine [redacted]'s development, improvement, and/or appropriate design has not yet been determined by the examination team.

(3) Machines Delivered to Customers - Conclusion

According to the taxpayer,[3] these machines, whether shipped with "purchase price" or "zero-dollar" invoices, were subject to an evaluation period subsequent to delivery. According to the taxpayer's study, "[redacted]."[4] During this period of time, which lasts approximately [redacted] to [redacted], the machine is used and evaluated at [redacted] by the customer, as well as the taxpayer.[5] In some cases, the customer may return the machine to the taxpayer, with a limited penalty.

---

[3] The taxpayer representations made in this sentence have not been substantiated. Solely for the purpose of this memorandum, however, we assume them to be true.

[4] Although the taxpayer initially represented to the examination team (both orally and in writing) that the taxpayer and its customers entered into written [redacted] testing agreements with respect to the machines in question, the taxpayer, despite repeated requests, has never produced any such written agreements.

[5] The taxpayer claims that wages paid to certain employees involved in evaluating the machines located at the [redacted] were for the performance of qualified services under section 41(b)(2)(B). This issue, however, is beyond the scope of this memorandum.

(b) "On-Site" Machines

(1) "On-Site" Machines - [redacted]

The taxpayer maintains manufacturing facilities in various locations in the United States, including [redacted]. At the [redacted] location, the taxpayer has a demonstration facility where customers can evaluate the taxpayer's machines and run tests [redacted]. A representative sample of the machines used by the taxpayer for these purposes is Machine [redacted].

(A) Machine [redacted]

Machine [redacted] was manufactured by the taxpayer in the United States, and used by the taxpayer for the purposes set forth in (1), above. The cost of the component material used in manufacturing Machine [redacted] was $[redacted]. The cost of the labor and other elements involved in Machine [redacted]'s construction and installation, as well as the cost (if any) of activities intended to discover information that would eliminate uncertainty concerning Machine [redacted]'s development, improvement, and/or appropriate design has not yet been determined by the examination team.

(2) "On-Site" Machines - Foreign

The taxpayer also maintains foreign demonstration facilities. For example, in [redacted], the taxpayer completed its "[redacted]" in [redacted], which allows customers to evaluate the taxpayer's machines. A representative sample of the machines used by the taxpayer for this purpose is Machine [redacted].

(A) Machine [redacted]

Machine [redacted] was manufactured by the taxpayer in the United States, and used by the taxpayer for the purpose set forth in (2), above. The cost of the component material used in manufacturing Machine [redacted] was $[redacted]. The cost of the labor and other elements involved in Machine [redacted]'s construction and installation, as well as the cost (if any) of activities intended to discover information that would eliminate uncertainty concerning Machine [redacted]'s development, improvement, and/or appropriate design has not yet been determined by the examination team.

DISCUSSION

(a) Law

(1) Section 174

Section 174(a) provides that a taxpayer may treat research or experimental expenditures which are paid or incurred by him during the taxable year in connection with his trade or business as expenses which are not chargeable to capital account. The expenditures so treated shall be allowed as a deduction. Section 174(c) provides, in relevant part, that section 174 will not apply to any expenditure for the acquisition or improvement of land, or for the acquisition or improvement of property to be used in connection with the research or experimentation and of a character that is subject to the allowance under section 167 (relating to allowance for depreciation, etc.).

Section 1.174-2(b) of the Income Tax Regulations ("Regulations") contains rules relating to certain expenditures with respect to land and other property. Section 1.174-2(b)(1) of the Regulations provides that expenditures by the taxpayer for the acquisition or improvement of land, or for the acquisition or improvement of property which is subject to an allowance for depreciation under section 167, are not deductible under section 174, irrespective of the fact that the property or improvements may be used by the taxpayer in connection with research or experimentation. However, allowances for depreciation of property are considered as research or experimental expenditures, for purposes of section 174, to the extent that the property to which the allowances relate is used in connection with research or experimentation.

Section 1.174-2(b)(2) of the Regulations provides, in relevant part, that expenditures for research or experimentation which result, as an end product of the research or experimentation, in depreciable property to be used in the taxpayer's trade or business may, subject to the limitations of section 1.174-2(b)(4) of the Regulations, be allowable as a current expense deduction under section 174(a).

Section 1.174-2(b)(4) of the Regulations provides that the deductions referred to in sections 1.174-2(b)(2) and (3) of the Regulations for expenditures in connection with the acquisition or production of depreciable property to be used in the taxpayer's trade or business are limited to amounts expended for research or experimentation. Thus, amounts expended for research or experimentation do not include the costs of the component materials

of the depreciable property, the costs of labor or other elements involved in its construction and installation, or costs attributable to the acquisition or improvement of the property. For example, a taxpayer undertakes to develop a new device for use in his business. He expends $30,000.00 on the project of which $10,000.00 represents the actual costs of material, labor, etc., to construct the device, and $20,000.00 represents research costs which are not attributable to the device itself. Under section 174(a) the taxpayer would be permitted to deduct the $20,000.00 as expenses not chargeable to capital account, but the $10,000.00 must be charged to the asset account (the device).

(2) Section 41

Section 41 allows taxpayers a credit against tax for increasing research activities. Generally, the credit is an incremental credit equal to the sum of 20 percent of the excess (if any) of the taxpayer's "qualified research expenses" for the taxable year over the base amount, and 20 percent of the taxpayer's basic research payments. Section 41(b)(1) provides that the term "qualified research expenses" means the sum of the following amounts which are paid or incurred by the taxpayer during the taxable year in carrying on any trade or business of the taxpayer: (A) in-house research expenses, and (B) contract research expenses.

Section 41(b)(2)(A)(ii) provides "in-house research expenses" includes any amount paid or incurred for supplies used in the conduct of qualified research. Section 41(b)(2)(C) defines "supplies" as any tangible property other than (i) land or improvements to land, and (ii) property of a character subject to the allowance for depreciation.

Section 41(d)(1) provides that the term "qualified research" means research: (A) with respect to which expenditures may be treated as expenses under section 174; (B) that is undertaken for the purpose of discovering information (i) that is technological in nature, and (ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer; and (C) substantially all of the activities of which constitute elements of a process of experimentation for a purpose described in section 41(d)(3). Such term does not include any activity described in section 41(d)(4).

The phrase "the research expenditures may be treated as expenses under section 174" requires the taxpayer to satisfy all of the elements for a deduction under section 174 with respect to the expenditures in question. See, e.g., Norwest v. Commissioner, 110 T.C. 454, 491 (1998), appeals pending sub nom., Wells Fargo & Co. v. Commissioner, Nos. 99-3878, 99-3883, 99-4071 (8th Cir. 1999).

(b) Analysis

(1) Introduction

The issue in this memorandum is whether costs attributable to the component material used in the manufacture of these machines, as well as the costs attributable to the labor or other elements involved in their construction and installation, may be treated as research and experimental expenditures under section 174, and whether these costs may also be treated as qualified research expenses under section 41. It is our view that since these costs were paid or incurred for the construction of property of a character subject to an allowance for depreciation under section 167, they may not be treated as research and experimental expenditures under section 174 regardless of whether the taxpayer is entitled to claim an allowance for depreciation with respect to the machines in question. However, any such allowances for depreciation may be treated as research and experimental expenditures, for purposes of section 174, to the extent that the property to which the allowances relate was used in connection with research or experimentation.[6]

Since the costs of the component material used in the manufacture of these machines, as well as the costs attributable to the labor or other elements involved in their construction and installation, may not be treated as research and experimental expenditures under section 174, we further conclude that these costs may not be treated as qualified research expenses. I.R.C. § 41(d)(1)(A); see Norwest, 110 T.C. at 491. We further conclude that any allowances to the taxpayer for depreciation on these machines under section 174(c)[7] are excluded from the definition of supplies under section 41(b)(2)(C)(ii).

---

[6] The issue of whether the taxpayer is entitled to allowances for depreciation during these years, as well as the issue of whether the machines were used in connection with research or experimentation, are beyond the scope of this memorandum.

[7] Supra note 6.

(2) Section 174 Analysis

(a) Introduction

Section 174 provides that a taxpayer may treat research and experimental expenditures that are paid or incurred by him during the taxable year in connection with his trade or business as expenses that are not chargeable to capital account. Research and experimental expenditures are generally defined as expenditures incurred in connection with the taxpayer's trade or business which represent research and development costs in the experimental or laboratory sense but only so long as they are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product. Treas. Reg. § 1.174-2(a)(1). Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product or the appropriate design of the product. Id.

Under certain circumstances, however, expenses attributable to research or experimentation undertaken either directly by the taxpayer or on behalf of the taxpayer by a third person will not be deductible under section 174, such as expenditures attributable to the acquisition or improvement of property which is subject to an allowance for depreciation under section 167. I.R.C. § 174(c). Section 1.174-2(b)(1) of the Regulations generally provides that a taxpayer's expenditures for the acquisition or improvement of property which is subject to an allowance for depreciation under section 167 are not deductible under section 174, irrespective of the fact that the property or improvements may be used by the taxpayer in connection with research or experimentation. Section 1.174-2(b)(2) of the Regulations provides, in relevant part, that expenditures for research or experimentation which result, as an end product of the research or experimentation, in depreciable property to be used in the taxpayer's trade or business may, subject to the limitations of section 1.174-2(b)(4) of the Regulations, be allowable as a current expense deduction under section 174(a). Section 1.174-2(b)(4) of the Regulations provides that the deductions referred to in sections 1.174-2(b)(2) and (3) of the Regulations for expenditures in connection with the acquisition or production of depreciable property to be used in the taxpayer's trade or business are limited to amounts expended for research or experimentation and do not include the costs attributable to the construction of the property.

Two types of expense are implicated by these rules: (1) expense incurred for activities intended to discover information that would eliminate uncertainty concerning the development, improvement, or appropriate design of a product (section 1.174-2(a)(1) of the Regulations); and (2) expense attributable to the component material, labor or other elements involved in the construction and installation of a product. The former type of expense, to the extent it can be traced to activities intended to discover information that would eliminate uncertainty concerning the development, improvement, or appropriate design of a product, is deductible for purposes of section 174; the latter type of expense, to the extent it represents costs for the construction of a depreciable asset, is not deductible. Cf. Rev. Rul. 73-275, 1973-1 C.B. 134 (holding that costs attributable to the development and design of an automated manufacturing system, as distinguished from costs attributable to the production of the manufacturing system, are deductible under section 174).

(2) Property of a Character Subject to the Allowance for Depreciation

Under the present facts, the expenditures in question are those attributable to the component material used in manufacturing these machines, as well as the costs attributable to the labor or other elements involved in their construction and installation. These machines, however, are property of a character subject to the allowance for depreciation, regardless of whether the taxpayer is entitled to claim allowances for depreciation.

For purposes of section 174, the plain meaning of the term "property of a character subject to an allowance for depreciation" refers solely to the character of the property, and not to whether it is depreciable in the hands of a particular taxpayer. Ekman v. Commissioner, 184 F.3d 522, 526 (6th Cir. 1999), aff'g. T.C. Memo 1997-318. The term has been construed to require only that the property be subject to exhaustion, wear and tear, or obsolescence. See Noyce v. Commissioner, 97 T.C. 670, 688-90 (1991). See also Simon v. Commissioner, 68 F.3d 41 (2d Cir. 1995), aff'g 103 T.C. 247 (1994) (court reviewed), nonacq. 1996-2 C.B. 2, and 1997-1 I.R.B. 6; Liddle v. Commissioner, 65 F.3d 329 (3d Cir. 1995), aff'g 103 T.C. 285 (1994) (court reviewed), nonacq. 1996-2 C.B. 2, and

1997-1 I.R.B. 6.[8,9]

There is no question that these machines, [redacted] at the taxpayer's and/or the customers' place of business, are subject to exhaustion, wear and tear or obsolescence and were used in a trade or business or held for the production of income. Accordingly, these machines are property of a character subject to an allowance for depreciation, and the costs of the component material used in their manufacture,[10] as well as the costs attributable to the labor or other elements involved in their construction and installation, may not be treated as research and experimental expenditures under section 174. Treas. Reg. § 1.174-2(b)(4). However, any such allowances for depreciation may be treated as research and experimental expenditures, for purposes of section 174, to the extent that the property to which the allowances relate was used in connection with research or experimentation.[11]

---

[8] The Commissioner's nonacquiescence in both Simon and Liddle is limited to the section 167 requirements for a determinate useful life and reduction of basis for salvage value.

[9] We note that in TAM 199927001, a potential requirement that "the property be used in a trade or business or held for the production of income" and that "the property be used over a period of years" was interposed. As discussed supra, these machines were used over a period of years by either the taxpayer, the customer, or a combination thereof. In addition, as discussed infra, these machines were used in the taxpayer's and/or the customers' trade or business, or for the production of income.

[10] It is unclear whether (and to what extent) any of the component material used in the manufacture of these machines may be, in and of itself, property of a character subject to an allowance for depreciation, notwithstanding the character of the machine as a whole.

[11] Supra note 6.

(b) Section 41 Analysis

(1) Component Material Etc.

Since the costs of the component material used in the manufacture of these machines, as well as the costs attributable to the labor or other elements involved in their construction and installation, may not be treated as research and experimental expenditures under section 174, we further conclude that these costs may not be treated as section 41 QREs. I.R.C. § 41(d)(1)(A); see Norwest, 110 T.C. at 491.

(2) Allowances for Depreciation

Section 41(b)(1) provides that the term "qualified research expenses" means the sum of the following amounts which are paid or incurred by the taxpayer during the taxable year in carrying on any trade or business of the taxpayer: (A) in-house research expenses, and (B) contract research expenses. Section 41(b)(2)(A)(ii) provides "in-house research expenses" includes, in relevant part, (1) any wages paid or incurred to an employee for qualified services performed by such employee, as well as (2) any amount paid or incurred for supplies used in the conduct of qualified research. Section 41(b)(2)(C) defines "supplies" as any tangible property other than (i) land or improvements to land, and (ii) property of a character subject to the allowance for depreciation.

As a preliminary matter, it is clear that any allowances to the taxpayer for depreciation on these machines are not wages or contract research expenses. Moreover, any allowances to the taxpayer for depreciation on these machines is an amount paid or incurred for tangible property of a character subject to depreciation, and is therefore excluded from the definition of supplies pursuant to section 41(b)(2)(C)(ii). Accordingly, any allowances to the taxpayer for depreciation on these machines under 174(c)[12] are excluded from the definition of qualified research expenses under section 41(b)(2)(C)(ii).

[12] Supra note 6.

This writing may contain privileged information. Any unauthorized disclosure of this writing may have an adverse effect on privileges, such as the attorney client privilege. If disclosure becomes necessary, please contact this office for our views.

If you have any questions regarding this memorandum, please contact the undersigned at (212) 298-2060.

PETER J. GRAZIANO
Associate Area Counsel (IP)

By: _____
DANIEL A. ROSEN
Industry Counsel,
Research Credit

cc: Roland Barral, Area Counsel (CC:LM:F)
Peter J. Graziano, Associate Area Counsel (IP) (CC:LM:F)
Nancy V. Knapp, Senior Legal Counsel (CC:LM:F:SLC)
Anthony J. Kim, Senior Attorney (CC:LM:CTM:SF)